

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A hot plate for heating a wafer comprising a ceramic substrate, said ceramic substrate having a lower face having a surface roughness of 2 μm or less and an upper face,

wherein a resistance element pattern having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed on the lower face of the ceramic substrate; and

wherein said resistance element comprises a first layer comprising titanium; a second layer comprising molybdenum and having a larger thickness than said first layer, on said first layer; and a third layer comprising nickel and having an intermediate thickness between the thickness of said first layer and that of said second layer, on said second layer.

Claim 2 (Original): The hot plate according to claim 1, wherein the thickness dispersion of the resistance element is $\pm 1 \mu\text{m}$ or less.

Claim 3 (Previously Presented): The hot plate according to claim 1, wherein the thickness of said resistance element is from 0.5 to 500 μm .

Claim 4 (Previously Presented): The hot plate according to claim 1, wherein the thickness of said resistance element is from 1 to 10 μm .

Claim 5 (Previously Presented): The hot plate according to claim 1, wherein said ceramic substrate is at least one kind selected from a nitride ceramic and a carbide ceramic.

Claims 6-8 (Canceled).

Claim 9 (Currently Amended): The hot plate according to claim 1, wherein ~~said~~
~~resistance element comprises a~~ said titanium layer ~~having~~ has a thickness of 0.1 to 0.5 μm , a
said molybdenum layer ~~having~~ has a thickness of 0.5 to 7.0 μm , on said titanium layer, and a
said nickel layer ~~having~~ has a thickness of 0.4 to 2.5 μm , on said molybdenum layer.

Claims 10-27 (Canceled).

Claim 28 (Previously Presented): A process comprising heating a wafer with the hot
plate according to claim 1.

Claim 29 (Previously Presented): A hot plate for heating a wafer comprising a
ceramic substrate, said ceramic substrate having a lower face having a surface roughness of 2
 μm or less and an upper face,

wherein

a resistance element pattern having a thickness dispersion of $\pm 3 \mu\text{m}$ or less is formed
on the lower face of the ceramic substrate,

the thickness dispersion being the larger of the absolute value of $T_{\text{max}} - T_{\text{av}}$ and the
absolute value of $T_{\text{min}} - T_{\text{av}}$, T_{av} being an average thickness obtained by averaging
thicknesses of arbitrarily selected 10 points of the resistance element, T_{av} being within a
range of 3 to 500 μm , T_{max} being the maximum thickness of said 10 points, and T_{min} being
the minimum thickness of said 10 points.

Claim 30 (Previously Presented): The hot plate according to claim 29,
wherein the thickness dispersion of the resistance element is $\pm 1 \mu\text{m}$ or less.

Claim 31 (Previously Presented): The hot plate according to claim 29,
wherein the thickness of said resistance element is from 0.5 to 500 μm .

Claim 32 (Previously Presented): The hot plate according to claim 29,
wherein the thickness of said resistance element is from 1 to 10 μm .

Claim 33 (Previously Presented): The hot plate according to claim 29,
wherein said ceramic substrate is at least one kind selected from a nitride ceramic and
a carbide ceramic.

Claim 34 (Previously Presented): The hot plate according to claim 29,
wherein said resistance element has a multilayer structure, and among a plurality of
layers constituting said resistance element, the layer nearest to the substrate comprises
titanium or chromium.

Claim 35 (Previously Presented): The hot plate according to claim 29,
wherein said resistance element comprises a first layer comprising titanium; a second
layer comprising molybdenum and having a larger thickness than said first layer, on said first
layer; and a third layer comprising nickel and having an intermediate thickness between the
thickness of said first layer and that of said second layer, on said second layer.

Claim 36 (Previously Presented): The hot plate according to claim 29,
wherein said resistance element comprises a titanium layer having a thickness of 0.1 to 0.5 μm , a molybdenum layer having a thickness of 0.5 to 7.0 μm , on said titanium layer, and a nickel layer having a thickness of 0.4 to 2.5 μm , on said molybdenum layer.

Claim 37 (Previously Presented): The hot plate according to claim 29,
wherein said resistance element pattern is formed by a dry process.

Claim 38 (Previously Presented): The hot plate according to claim 37,
wherein the thickness dispersion of the resistance element is $\pm 1 \mu\text{m}$ or less.

Claim 39 (Previously Presented): The hot plate according to claim 37,
wherein the thickness of said resistance element is from 0.5 to 500 μm .

Claim 40 (Previously Presented): The hot plate according to claim 37,
wherein the thickness of said resistance element is from 1 to 10 μm .

Claim 41 (Previously Presented): The hot plate according to claim 37,
wherein said ceramic substrate is at least one kind selected from a nitride ceramic and a carbide ceramic.

Claim 42 (Previously Presented): The hot plate according to claim 37,
wherein said dry process is RF sputtering.

Claim 43 (Previously Presented): The hot plate according to claim 29,
wherein said resistance element pattern is made of scaly noble metal powder.

Claim 44 (Previously Presented): The hot plate according to claim 43,
wherein the thickness dispersion of the resistance element is $\pm 1 \mu\text{m}$ or less.

Claim 45 (Previously Presented): The hot plate according to claim 43,
wherein the thickness of said resistance element is from 0.5 to 500 μm .

Claim 46 (Previously Presented): The hot plate according to claim 43,
wherein the thickness of said resistance element is from 3 to 10 μm .

Claim 47 (Previously Presented): The hot plate according to claim 43,
wherein said ceramic substrate is at least one kind selected from a nitride ceramic and
a carbide ceramic.

Claim 48 (Previously Presented): A process comprising heating a wafer with the hot
plate according to claim 29.

Claim 49 (New): A process for producing the hot plate as claimed in claim 29, which
comprises:

forming said resistance element by a film-depositing method based on a dry process.

Claim 50 (New): A process for producing the hot plate as claimed in claim 29, which comprises:

forming said resistance element by RF sputtering.

Claim 51 (New): A process for producing the hot plate as claimed in claim 29, which comprises:

printing a resistance element paste made of scaly noble metal powder and firing the paste.